

REMARKS

Please enter and consider the foregoing amendment. Claims 1-13 are pending in the application. Applicant has amended independent claim 1. Applicant respectfully submits that support for the amendment can be found in the specification at least on page 6, lines 15-31 and with respect to FIGS. 3 and 4. In view of the foregoing amendment reconsideration and allowance of the presently pending claims is respectfully requested.

I. Objection to the Drawings

A. Statement of the Rejection

The drawings are objected to under 37 C.F.R. 1.83(a). The Office Action states that “[t]he drawings must show every feature of the invention specified in the claims. Therefore, the particles being evenly settled on and around the light emitter and the evenly disperse, uniform thickness particle coating must be shown or the feature(s) canceled from the claim(s).”

B. Discussion of the Rejection

Applicant respectfully submits that Figure 3 indeed shows a uniform thickness particle coating evenly settled on and around the light emitter. Specifically, Figure 3 clearly shows particulate phosphor material 25 evenly settled on and around the LED die 21. Further, the specification on page 6, lines 26-30 states that “by careful selection of the dimensions of platform 29 and of the other structural components, and dependent on the physical properties of materials 25 and 26, the thickness of the luminescent material may be approximately constant over the entire surface and sides of die 21.” Applicant respectfully submits that Figures 3 and 4 clearly show that the particulate phosphor material 25, which is indicated with dashed lines, is evenly dispersed on and around the light emitter, and respectfully request that the objection be withdrawn.

II. Response to 35 U.S.C. § 112, first paragraph Rejection – Claims 1-13

A. Statement of the Rejection

Claims 1-13 are rejected under 35 U.S.C. § 112, first paragraph, as allegedly failing to comply with the written description requirement. The Office Action states that the claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the invention. The Office Action states that “[c]laim 1 recites a coating having and adhesive material and particles of another substance wherein

the coating is dispersed in such a way as to result “in an evenly dispersed, uniform thickness particle coating over the light emitter, the projecting platform and the trough.” There is no support in the specification or the figures for an evenly dispersed, uniform thickness particle coating over the projecting platform or the trough.”

B. Discussion of the Rejection

Applicant respectfully submits that Figure 3 indeed shows a uniform thickness particle coating evenly settled on and around the light emitter, the projecting platform and the trough.

Figures 3 and 4 clearly show the particulate phosphor material 25 as a series of dashed lines that clearly appear as a uniform thickness on and around the light emitter, the platform and the trough, especially when compared with prior art figure 1. Applicant also points to page 6, lines 19-21, which refer to the epoxy material 26 having the particulate phosphor material 25 suspended therein, and which states “[t]he applied material flows over die 21 and platform 29 to fill reflector cup 22.” This description, along with the description on page 6, lines 20-22, which describe the trough as an “outer annular trough provided by reflector cup base 23, inclined wall 24, and the sides of raised platform 29,” is clearly sufficient description for the claimed feature of “an evenly dispersed, uniform thickness particle coating over the light emitter, the surface of the projecting platform and the trough.”

Accordingly, Applicant respectfully submits that claims 1-13 are in compliance with 35 U.S.C. § 112, first paragraph, and request that the rejection be withdrawn.

III. Response to 35 U.S.C. § 112, second paragraph Rejection – Claims 1 and 9

A. Statement of the Rejection

Claims 1 and 9 are rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

With regard to claim 1, the Office Action states “[t]he claim recites a “uniform thickness particle coating over the light emitter, the projecting platform and the trough.” It is unclear whether the thickness is measured vertically from the base of the cavity or at normal to the tangential lines of the surfaces of the cavity, the trough, the platform and the LED contacting the bottom of the coating.

With regard to claim 9, the Office Action states “[t]he claim recites the platform allowing the particles within the coating to settle to a lower position towards the periphery of the base of the cavity before the coating is cured. It is unclear what the relative term “lower”

is in respect to.”

B. Discussion of the Rejection

With regard to claim 1, Applicant respectfully submits that Figure 3 indeed shows a uniform thickness particle coating evenly settled on and around the light emitter, the projecting platform and the trough, wherein “the particulate phosphor material 25 is able to settle to a lower position toward the periphery of the reflector cup 22 than would otherwise be the case, as figure 3 shows.” *See* specification, page 6, lines 22-24.

Applicant respectfully submits that, because drawing figures 3 and 4 are illustrated as a sectional view, the uniform thickness of the particle coating is with respect to the exposed surfaces of the LED die 21, the projecting platform 29 and the trough, which is formed by the reflector cup base 23, inclined wall 24, and the sides of raised platform 29.

Applicant respectfully submits that Figures 3 and 4 clearly show the thickness of the particle coating (the particulate phosphor material 25) as being with respect to surfaces of the respective structure over which it is applied. Applicant has amended claim 1 to recite “resulting in an evenly dispersed, uniform thickness particle coating over the light emitter, the surface of the projecting platform and the trough, the thickness of the particle coating being constant with respect to the light emitter, the surface of the projecting platform and the trough.”

With regard to claim 9, Applicant respectfully submits that Figure 3 indeed shows a uniform thickness particle coating evenly settled on and around the light emitter, the projecting platform and the trough, wherein “the particulate phosphor material 25 is able to settle to a lower position toward the periphery of the reflector cup 22 than would otherwise be the case, as figure 3 shows.” *See* specification, page 6, lines 22-24.

Applicant respectfully submits that the term “lower” in claim 9 is meant to describe the settling of the particle coating at the periphery of the reflector cup base 23. Applicant has amended claim 9 to recite “wherein the platform allows the particles within the coating to settle to a lower position with respect to the light emitter towards the periphery of the base of the cavity before the coating is cured.”

Accordingly, Applicant respectfully submits that claims 1 and 9 are in compliance with 35 U.S.C. § 112, second paragraph, and request that the rejection be withdrawn.

IV. Response to 35 U.S.C. § 103 Rejection – Claims 1, 2, 6-7, 9-11 and 13

A. Statement of the Rejection

Claims 1, 2, 6-7, 9-11 and 13 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Patent No. 3,555,335 to *Johnson* in view of U.S. Patent No. 5,959,316 to *Lowery*.

B. Discussion of the Rejection

Applicant respectfully traverses the rejection of claims 1, 2, 6-7, 9-11 and 13 under 35 U.S.C. § 103(a) over the combination of *Johnson* and *Lowery* for at least the reason that the proposed combination fails to disclose, teach, or suggest each element in the claims. For a proper rejection under 35 U.S.C. § 103(a), a combination of references must expressly or impliedly suggest all of the features of the claimed invention, *i.e.*, all of the features cited in the claims at issue. *In re Gorman*, 933 F.2d 982, 18 USPQ 1885 (Fed. Cir. 1991). Hindsight reconstruction is impermissible. *See, e.g., Vas-Cath, Inc. v. Mahurkar*, 935 F.2d 1555, 19 USPQ2d 1111 (Fed. Cir. 1991). For a claim to be properly rejected under 35 U.S.C. § 103, “[t]he PTO has the burden under section 103 to establish a *prima facie* case of obviousness. It can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references.” *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988) (Citations omitted).

Further, “[t]he mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification.” *In re Fritch*, 972 F.2d 1260, 1266, 23 U.S.P.Q.2d 1780 (Fed Cir. 1992).

Applicant respectfully submits that the proposed combination fails to disclose, teach or suggest Applicant’s light emitting device, comprising at least “a base substrate with a cavity and a trough to form a reflective cup,” “a projecting platform at the base of the cavity, ***the projecting platform having vertical walls and a surface***,” “a light emitter mounted on the projecting platform, the light emitter being smaller in outline than the projecting platform,” and “a coating having an adhesive material and particles of another substance, wherein the coating is a viscous slurry when applied over ***and in direct contact with*** the light emitter in the cavity, and hardens when cured after being applied over the light emitter in the cavity, wherein when the coating, when being a viscous slurry, is applied over the light emitter, the platform, the cavity, and the trough allow the particles in the coating to be evenly settled on

and around the light emitter within the cavity before the coating is cured, ***resulting in an evenly dispersed, uniform thickness particle coating over the light emitter, the surface of the projecting platform and the trough, the thickness of the particle coating being constant with respect to the light emitter, the surface of the projecting platform and the trough,***” as recited in independent claim 1.

Claim 1

For convenience of analysis, independent claim 1, as amended, is repeated below in its entirety.

1. A light emitting device, comprising:
 - a base substrate with a cavity and a trough to form a reflective cup;
 - a projecting platform at the base of the cavity, ***the projecting platform having vertical walls and a surface;***
 - a light emitter mounted on the projecting platform, the light emitter being smaller in outline than the projecting platform; and
 - a coating having an adhesive material and particles of another substance, wherein the coating is a viscous slurry when applied over the light emitter in the cavity, and hardens when cured after being applied over ***and in direct contact with*** the light emitter in the cavity, wherein when the coating, when being a viscous slurry, is applied over the light emitter, the platform, the cavity, ***and the trough*** allow the particles in the coating to be evenly settled on and around the light emitter within the cavity before the coating is cured, ***resulting in an evenly dispersed, uniform thickness particle coating over the light emitter, the surface of the projecting platform and the trough, the thickness of the particle coating being constant with respect to the light emitter, the surface of the projecting platform and the trough.***

(Applicant's independent claim 1 - *emphasis added.*)

Applicant respectfully asserts that the proposed combination fails to disclose, teach, or suggest at least the emphasized elements of pending claim 1 as shown above. Consequently, claim 1 is allowable. Specifically, the proposed combination fails to disclose, teach, or suggest Applicant's light emitting device comprising at least “a base substrate with a cavity and a trough to form a reflective cup,” “a projecting platform at the base of the cavity, ***the projecting platform having vertical walls and a surface,***” “a light emitter mounted on the projecting platform, the light emitter being smaller in outline than the projecting platform,” and “a coating having an adhesive material and particles of another substance, wherein the coating is a viscous slurry when applied over ***and in direct contact*** with the light emitter in the cavity, and hardens when cured after being applied over the light emitter in the cavity, wherein when the coating, when being a viscous slurry, is applied over the light emitter, the platform, the cavity, and the trough allow the particles in the coating to be evenly settled on and around the light emitter

within the cavity before the coating is cured, ***resulting in an evenly dispersed, uniform thickness particle coating over the light emitter, the surface of the projecting platform and the trough, the thickness of the particle coating being constant with respect to the light emitter, the surface of the projecting platform and the trough.***”

Johnson discloses a device for enlarging the apparent light-emitting area of an electroluminescent diode. The device is a faceted body having a specular surface designed to be placed around the light-emitting diode. See *Johnson*, Abstract. The diode 30 rests on a pedestal 31 and is surrounded by reflective facets 33, 34 and 35. See e.g., *Johnson*, col. 3, lines 38-44.

Lowery discloses that “the deposition of a transparent spacer 50 over and around the LED 18 and separating a substantially uniform thickness layer of fluorescent material 52 from the LED 18 will eliminate the annular rings.”

In marked contrast to the proposed combination, the present invention discloses a light emitting device comprising at least “a base substrate with a cavity and a trough to form a reflective cup,” “a projecting platform at the base of the cavity, ***the projecting platform having vertical walls and a surface,***” “a light emitter mounted on the projecting platform, the light emitter being smaller in outline than the projecting platform,” and “a coating having an adhesive material and particles of another substance, wherein the coating is a viscous slurry when applied over ***and in direct contact with*** the light emitter in the cavity, and hardens when cured after being applied over the light emitter in the cavity, wherein when the coating, when being a viscous slurry, is applied over the light emitter, the platform, the cavity, and the trough allow the particles in the coating to be evenly settled on and around the light emitter within the cavity before the coating is cured, ***resulting in an evenly dispersed, uniform thickness particle coating over the light emitter, the surface of the projecting platform and the trough, the thickness of the particle coating being constant with respect to the light emitter, the surface of the projecting platform and the trough.***”

Applicant respectfully disagrees with the statement in the Office Action that “[r]egarding claim1, Lowery teaches a coating having a hardened adhesive material (Figure 4, element 66) and particles of another substance.” Applicant respectfully submits that the element 66 of *Lowery* is a fluorescent material, not an adhesive material as stated in the Office Action. Applicant agrees with the Office Action in that *Lowery* teaches a layer of fluorescent material 52 being of uniform thickness. However, *Lowery*’s layer of fluorescent material 52, as clearly shown in figure 3, is a planar structure that follows the contour of the transparent spacer 50, or is a curved (element 66 in Figure 4) structure that follows the contour of the transparent spacer

60.

Applicant also respectfully disagrees with the statement in the Office Action that:

[t]he examiner notes that the limitation of the viscous slurry being applied over the light emitter and the particles being evenly settled on and around the light emitter before the coating is cured is directed to a process of manufacturing, which is incidental to the claimed apparatus. It is well established that a claimed apparatus cannot be distinguished over the prior art by a process limitation. Consequently, absent a showing of a difference between the claimed product and the prior art, the subject product-by-process claim limitation is not afforded patentable weight (see MPEP 2113).

Applicant respectfully submits that the claimed feature of:

wherein the coating is a viscous slurry when applied over and in direct contact with the light emitter in the cavity, and hardens when cured after being applied over the light emitter in the cavity, wherein when the coating, when being a viscous slurry, is applied over the light emitter, the platform, the cavity, and the trough allow the particles in the coating to be evenly settled on and around the light emitter within the cavity before the coating is cured, resulting in an evenly dispersed, uniform thickness particle coating over the light emitter, the surface of the projecting platform and the trough, the thickness of the particle coating being constant with respect to the light emitter, the surface of the projecting platform and the trough

represents a state of the material containing the particles when applied over the light emitter, and not a process limitation for fabricating the light emitting device. In the same way that “the word ‘frozen,’ though descriptive of the process freezing, definitely describes an objective characteristic observable by inspection of the product,” Applicant respectfully submits that the coating being applied as a viscous slurry describes the state of the material when being applied. *See, e.g.,* Saxe & Levitt, “Product-by-Process Claims and Their Current Status in Chemical Patent Office Practice,” 42 J. Pat. Off. Soc’y 528, 536 (1960).

Further, in a claim that recited “expanded perlite particles which are interbonded one to another by interfusion between the surfaces of the perlite particles while in a pyroplastic state to form a porous perlite panel,” the Court of Customs and Patent Appeals held that “interbonded...by interfusion” should be interpreted as a structural rather than a process limitation. *In re Garnero*, 412 F.2d 276, 162 USPQ 221 (CCPA 1969). Accordingly, Applicant respectfully submits that the coating being applied as a viscous slurry describes the state of the material when being applied and is not a process limitation.

Applicant respectfully submits that it is the structure of the LED die 21, the projecting platform 29 and the trough that allows the particles in the coating to be evenly settled around the

light emitter, and not the fact that the particles are suspended in a viscous slurry when they are applied. Applicant respectfully submits that it is not a product by process limitation.

Applicant respectfully submits that there is nothing in *Johnson* or *Lowery* to suggest that an annular trough and a raised platform over which an LED die is located would create an even dispersion of particle coating on and around the light emitter. *Lowery* is attempting to solve the same problem identified by the Applicant, but is attempting it in a completely different manner. Specifically, *Lowery* teaches a transparent spacer 50 (Figure 3) or 60 (Figure 4) to ensure an even coating of fluorescent material 66 over the light emitter. However, the transparent spacer 50 or 60 separates the fluorescent material 66 from the light emitter. Applicant respectfully submits that this teaches away from Applicant's invention in that Applicant has modified the structure on which the LED die is placed and the structure of the region surrounding the LED die to achieve a uniform dispersion of fluorescent material in direct contact with and over the LED die.

Neither does *Johnson* disclose, teach or suggest the use of a projecting platform having vertical walls and a trough surrounding the light emitter to create an even dispersion of particle coating on and around the light emitter. Indeed, there is nothing in either *Johnson* or *Lowery* that would lead one having ordinary skill in the art to combine *Johnson* and *Lowery* to arrive at Applicant's invention. *Lowery*'s transparent spacer prevents the fluorescent material from being applied in direct contact with the light emitter, and therefore teaches away from Applicant's invention.

Thus, the proposed combination fails to disclose, teach, or suggest each element of the Applicant's independent claim 1. Consequently, Applicant respectfully submits that claim 1 is allowable over the proposed combination and requests that the rejection of claim 1 be withdrawn.

Because independent claim 1 is allowable, dependent claims 2, 6-7, 9-11 and 13 which depend either directly or indirectly from allowable independent claim 1 are also allowable. *In re Fine*, 837 F.2d 1071 (Fed. Cir. 1988). Accordingly, Applicant respectfully requests that the rejection of claims 1 2, 6-7, 9-11 and 13 be withdrawn.

V. Response to 35 U.S.C. § 103 Rejection – Claim 8

A. Statement of the Rejection

Claim 8 stands rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over *Johnson* in view of *Lowery* and further in view of U.S. Patent No. 5,019,746 to *Merg*.

B. Discussion of the Rejection

Applicant respectfully traverses the rejection of claim 8 under 35 U.S.C. § 103(a) over *Johnson* in view of *Lowery* and further in view of *Merg* for at least the reason that the proposed combination fails to disclose, teach, or suggest each element in the claims.

For at least the reason that the proposed combination fails to disclose, teach, or suggest at least Applicant's light emitting device comprising at least "a base substrate with a cavity and a trough to form a reflective cup," "a projecting platform at the base of the cavity, ***the projecting platform having vertical walls and a surface,***" "a light emitter mounted on the projecting platform, the light emitter being smaller in outline than the projecting platform," and "a coating having an adhesive material and particles of another substance, wherein the coating is a viscous slurry when applied over ***and in direct contact with*** the light emitter in the cavity, and hardens when cured after being applied over the light emitter in the cavity, wherein when the coating, when being a viscous slurry, is applied over the light emitter, the platform, the cavity, and the trough allow the particles in the coating to be evenly settled on and around the light emitter within the cavity before the coating is cured, ***resulting in an evenly dispersed, uniform thickness particle coating over the light emitter, the surface of the projecting platform and the trough, the thickness of the particle coating being constant with respect to the light emitter, the surface of the projecting platform and the trough,***" as recited in claim 1, Applicant respectfully submits that the proposed combination *does not* render Applicant's claim 8 obvious.

Further, Applicant respectfully submits that dependent claim 8 is allowable for at least the reason that dependent claim 8 depends from allowable claim 1. *In re Fine*, supra. Accordingly, Applicant respectfully requests that the rejection of claim 8 be withdrawn.

VI. Response to 35 U.S.C. § 103 Rejection – Claims 1, 3-6 and 9-13

A. Statement of the Rejection

Claims 1, 3-6 and 9-13 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Japanese Patent No. JP 62-235787 in view of *Lowery*.

B. Discussion of the Rejection

Applicant respectfully traverses the rejection of claims 1, 2, 6-7, 9-11 and 13 under 35 U.S.C. § 103(a) over the combination of *JP 62-235787* and *Lowery* for at least the reason that the proposed combination fails to disclose, teach, or suggest each element in the claims.

Applicant respectfully submits that the proposed combination fails to disclose, teach or suggest Applicant's light emitting device, comprising at least "a base substrate with a cavity and a trough to form a reflective cup," "a projecting platform at the base of the cavity,

*the projecting platform having vertical walls and a surface,” “a light emitter mounted on the projecting platform, the light emitter being smaller in outline than the projecting platform,” and “a coating having an adhesive material and particles of another substance, wherein the coating is a viscous slurry when applied over **and in direct contact with** the light emitter in the cavity, and hardens when cured after being applied over the light emitter in the cavity, wherein when the coating, when being a viscous slurry, is applied over the light emitter, the platform, the cavity, **and the trough** allow the particles in the coating to be evenly settled on and around the light emitter within the cavity before the coating is cured, **resulting in an evenly dispersed, uniform thickness particle coating over the light emitter, the surface of the projecting platform and the trough, the thickness of the particle coating being constant with respect to the light emitter, the surface of the projecting platform and the trough,**” as recited in amended independent claim 1.*

Applicant respectfully asserts that the proposed combination fails to disclose, teach, or suggest at least the emphasized elements of pending claim 1 as shown above. Consequently, claim 1 is allowable. Specifically, the proposed combination fails to disclose, teach, or suggest Applicant’s light emitting device comprising at least “a base substrate with a cavity and a trough to form a reflective cup,” “a projecting platform at the base of the cavity, ***the projecting platform having vertical walls and a surface,***” “a light emitter mounted on the projecting platform, the light emitter being smaller in outline than the projecting platform,” and “a coating having an adhesive material and particles of another substance, wherein the coating is a viscous slurry when applied over **and in direct contact with** the light emitter in the cavity, and hardens when cured after being applied over the light emitter in the cavity, wherein when the coating, when being a viscous slurry, is applied over the light emitter, the platform, the cavity, and the trough allow the particles in the coating to be evenly settled on and around the light emitter within the cavity before the coating is cured, **resulting in an evenly dispersed, uniform thickness particle coating over the light emitter, the surface of the projecting platform and the trough, the thickness of the particle coating being constant with respect to the light emitter, the surface of the projecting platform and the trough.**”

JP 62-235787 discloses a plurality of light emitting elements 25 over a conducting layer 37 and a substrate 36 located in a recess 33. The recess includes a tapered reflecting surface 34 for reflecting the light emitted from the light emitting elements 25. *See JP 62-235787, Abstract.*

As stated above, *Lowery* discloses that “the deposition of a transparent spacer 50 over

and around the LED 18 and separating a substantially uniform thickness layer of fluorescent material 52 from the LED 18 will eliminate the annular rings.”

In marked contrast to the proposed combination, the present invention discloses a light emitting device comprising at least “a base substrate with a cavity and a trough to form a reflective cup,” “a projecting platform at the base of the cavity, ***the projecting platform having vertical walls and a surface,***” “a light emitter mounted on the projecting platform, the light emitter being smaller in outline than the projecting platform,” and “a coating having an adhesive material and particles of another substance, wherein the coating is a viscous slurry when applied over ***and in direct contact with*** the light emitter in the cavity, and hardens when cured after being applied over the light emitter in the cavity, wherein when the coating, when being a viscous slurry, is applied over the light emitter, the platform, the cavity, and the trough allow the particles in the coating to be evenly settled on and around the light emitter within the cavity before the coating is cured, ***resulting in an evenly dispersed, uniform thickness particle coating over the light emitter, the surface of the projecting platform and the trough, the thickness of the particle coating being constant with respect to the light emitter, the surface of the projecting platform and the trough.***”

Applicant respectfully disagrees with the statement in the Office Action that:

[t]he examiner notes that the limitation of the viscous slurry being applied over the light emitter and the particles being evenly settled on and around the light emitter before the coating is cured is directed to a process of manufacturing, which is incidental to the claimed apparatus. It is well established that a claimed apparatus cannot be distinguished over the prior art by a process limitation. Consequently, absent a showing of a difference between the claimed product and the prior art, the subject product-by-process claim limitation is not afforded patentable weight (see MPEP 2113).

Applicant respectfully submits that the claimed feature of:

wherein the coating is a viscous slurry when applied over and in direct contact with the light emitter in the cavity, and hardens when cured after being applied over the light emitter in the cavity, wherein when the coating, when being a viscous slurry, is applied over the light emitter, the platform, the cavity, and the trough allow the particles in the coating to be evenly settled on and around the light emitter within the cavity before the coating is cured, resulting in an evenly dispersed, uniform thickness particle coating over the light emitter, the surface of the projecting platform and the trough the thickness of the particle coating being constant with respect to the light emitter, the surface of the projecting platform and the trough

represents a state of the material containing the particles when applied over the light emitter,

and not a process limitation for fabricating the light emitting device. In the same way that “the word ‘frozen,’ though descriptive of the process freezing, definitely describes an objective characteristic observable by inspection of the product,” Applicant respectfully submits that the coating being applied as a viscous slurry describes the state of the material when being applied. *See, e.g.,* Saxe & Levitt, “Product-by-Process Claims and Their Current Status in Chemical Patent Office Practice,” 42 J. Pat. Off. Soc’y 528, 536 (1960).

Further, in a claim that recited “expanded perlite particles which are interbonded one to another by interfusion between the surfaces of the perlite particles while in a pyroplastic state to form a porous perlite panel,” the Court of Customs and Patent Appeals held that “interbonded...by interfusion” should be interpreted as a structural rather than a process limitation. *In re Garner*, 412 F.2d 276, 162 USPQ 221 (CCPA 1969). Accordingly, Applicant respectfully submits that the coating being applied as a viscous slurry describes the state of the material when being applied and is not a process limitation.

Applicant respectfully submits that it is the structure of the LED die 21, the projecting platform 29 and the trough that allows the particles in the coating to be evenly settled around the light emitter, and not the fact that the particles are suspended in a viscous slurry when they are applied. Applicant respectfully submits that it is not a product by process limitation.

Applicant respectfully submits that there is nothing in Japanese Patent No. JP 62-235787 or *Lowery* to suggest that an annular trough and a raised platform over which an LED die is located would create an even dispersion of particle coating on and around the light emitter. *Lowery* is attempting to solve the same problem identified by the Applicant, but is attempting it in a completely different manner. Specifically, *Lowery* teaches a transparent spacer 50 (Figure 3) or 60 (Figure 4) to ensure an even coating of fluorescent material 66 over the light emitter. However, the transparent spacer 50 or 60 separates the fluorescent material 66 from the light emitter. Applicant respectfully submits that this teaches away from Applicant’s invention in that Applicant has modified the structure on which the LED die is placed and the structure of the region surrounding the LED die to achieve a uniform dispersion of fluorescent material in direct contact with and over the LED die.

Neither does Japanese Patent No. JP 62-235787 disclose, teach or suggest the use of a projecting platform having vertical walls and a trough surrounding the light emitter to create an even dispersion of particle coating on and around the light emitter. Indeed, there is nothing in either Japanese Patent No. JP 62-235787 or *Lowery* that would lead one having ordinary skill in the art to combine Japanese Patent No. JP 62-235787 and *Lowery* to arrive at Applicant’s

invention. *Lowery's* transparent spacer prevents the fluorescent material from being applied in direct contact with the light emitter, and therefore teaches away from Applicant's invention.

Thus, the proposed combination fails to disclose, teach, or suggest each element of the Applicant's independent claim 1. Consequently, Applicant respectfully submits that claim 1 is allowable over the proposed combination and requests that the rejection of claim 1 be withdrawn.

Because independent claim 1 is allowable, dependent claims 3-6 and 9-13 which depend either directly or indirectly from allowable independent claim 1 are also allowable. *In re Fine*, supra. Accordingly, Applicant respectfully requests that the rejection of claims 1 3-6 and 9-13 be withdrawn.

IV. Response to 35 U.S.C. § 103 Rejections – Claim 8

A. Statement of the Rejection

Claim 8 stands rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over *JP 62-235787* in view of *Lowery* and further in view of U.S. Patent No. 5,019,746 to *Merg*.

B. Discussion of the Rejection

Applicant respectfully traverses the rejection of claim 8 under 35 U.S.C. § 103(a) over *JP 62-235787* in view of *Lowery* and further in view of *Merg* for at least the reason that the proposed combination fails to disclose, teach, or suggest each element in the claims.

For at least the reason that the proposed combination fails to disclose, teach, or suggest at least Applicant's light emitting device comprising at least "a base substrate with a cavity and a trough to form a reflective cup," "a projecting platform at the base of the cavity, ***the projecting platform having vertical walls and a surface,***" "a light emitter mounted on the projecting platform, the light emitter being smaller in outline than the projecting platform," and "a coating having an adhesive material and particles of another substance, wherein the coating is a viscous slurry when applied over ***and in direct contact*** with the light emitter in the cavity, and hardens when cured after being applied over the light emitter in the cavity, wherein when the coating, when being a viscous slurry, is applied over the light emitter, the platform, the cavity, and the trough allow the particles in the coating to be evenly settled on and around the light emitter within the cavity before the coating is cured, ***resulting in an evenly dispersed, uniform thickness particle coating over the light emitter, the surface of the projecting platform and the trough, the thickness of the particle coating being constant with respect to the light emitter, the surface of the projecting platform and the trough,***" as recited in claim 1, Applicant respectfully submits that the proposed combination *does not*

render Applicant's claim 8 obvious.

Further, Applicant respectfully submits that dependent claim 8 is allowable for at least the reason that dependent claim 8 depends from allowable claim 1. *In re Fine*, supra. Accordingly, Applicant respectfully requests that the rejection of claim 8 be withdrawn.

CONCLUSION

In summary, Applicant respectfully requests that all outstanding claim rejections be withdrawn. Applicant respectfully submits that presently pending claims 1-13 are allowable and that the present application is in condition for allowance. Accordingly, a Notice of Allowance is respectfully solicited. Should the Examiner have any comment regarding the Applicant's response or believe that a teleconference would expedite prosecution of the pending claims, Applicant requests that the Examiner telephone Applicant's undersigned attorney.

Respectfully submitted,

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